



1

SEQUENCE LISTING

<110> QIN, NING
Codd, ELLEN E.
FLORES, CHRISTOPHER
ZHANG, SUI-PO

<120> HUMAN CYCLOOXYGENASE-3 ENZYME AND USES THEREOF

<130> PRD 2041

<140> 10/783,297
<141> 2004-02-20

<150> 60/449,230
<151> 2003-02-21

<160> 27

<170> PatentIn Ver. 3.3

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primer

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<223> Description of Artificial Sequence: Synthetic
primer

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<212> DNA
<213> Homo sapiens

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 <211> 31
 <212> PRT
 <213> Homo sapiens

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 20 25 30

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 <212> DNA
 <213> Homo sapiens

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 <211> 31
 <212> PRT
 <213> Homo sapiens

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 <213> Artificial Sequence

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 <223> Description of Artificial Sequence: Synthetic
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<210> 8
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<211> 630

<212> PRT

<213> Homo sapiens

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20 25 30

Ala Gly Ser Leu Leu Leu Trp Phe Leu Leu Phe Leu Leu Leu Leu Pro
35 40 45

Pro Leu Pro Val Leu Leu Ala Asp Pro Gly Ala Pro Thr Pro Val Asn
50 55 60

Pro Cys Cys Tyr Tyr Pro Cys Gln His Gln Gly Ile Cys Val Arg Phe
65 70 75 80

Gly Leu Asp Arg Tyr Gln Cys Asp Cys Thr Arg Thr Gly Tyr Ser Gly
85 90 95

Pro Asn Cys Thr Ile Pro Gly Leu Trp Thr Trp Leu Arg Asn Ser Leu
100 105 110

Arg Pro Ser Pro Ser Phe Thr His Phe Leu Leu Thr His Gly Arg Trp
 115 120 125
 Phe Trp Glu Phe Val Asn Ala Thr Phe Ile Arg Glu Met Leu Met Arg
 130 135 140
 Leu Val Leu Thr Val Arg Ser Asn Leu Ile Pro Ser Pro Pro Thr Tyr
 145 150 155 160
 Asn Ser Ala His Asp Tyr Ile Ser Trp Glu Ser Phe Ser Asn Val Ser
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 Tyr Tyr Thr Arg Ile Leu Pro Ser Val Pro Lys Asp Cys Pro Thr Pro
 180 185 190
 Met Gly Thr Lys Gly Lys Lys Gln Leu Pro Asp Ala Gln Leu Leu Ala
 195 200 205
 Arg Arg Phe Leu Leu Arg Arg Lys Phe Ile Pro Asp Pro Gln Gly Thr
 210 215 220
 Asn Leu Met Phe Ala Phe Phe Ala Gln His Phe Thr His Gln Phe Phe
 225 230 235 240
 Lys Thr Ser Gly Lys Met Gly Pro Gly Phe Thr Lys Ala Leu Gly His
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 Gly Val Asp Leu Gly His Ile Tyr Gly Asp Asn Leu Glu Arg Gln Tyr
 260 265 270
 Gln Leu Arg Leu Phe Lys Asp Gly Lys Leu Lys Tyr Gln Val Leu Asp
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 Gly Glu Met Tyr Pro Pro Ser Val Glu Glu Ala Pro Val Leu Met His
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 Tyr Pro Arg Gly Ile Pro Pro Gln Ser Gln Met Ala Val Gly Gln Glu
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 Val Phe Gly Leu Leu Pro Gly Leu Met Leu Tyr Ala Thr Leu Trp Leu
 325 330 335
 Arg Glu His Asn Arg Val Cys Asp Leu Leu Lys Ala Glu His Pro Thr
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 Trp Gly Asp Glu Gln Leu Phe Gln Thr Thr Arg Leu Ile Leu Ile Gly
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 Glu Thr Ile Lys Ile Val Ile Glu Glu Tyr Val Gln Gln Leu Ser Gly
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 Tyr Phe Leu Gln Leu Lys Phe Asp Pro Glu Leu Leu Phe Gly Val Gln
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Trp His Pro Leu Met Pro Asp Ser Phe Lys Val Gly Ser Gln Glu Tyr
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 Ser Tyr Glu Gln Phe Leu Phe Asn Thr Ser Met Leu Val Asp Tyr Gly
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 Val Glu Ala Leu Val Asp Ala Phe Ser Arg Gln Ile Ala Gly Arg Ile
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 Thr Leu Lys Lys Leu Val Cys Leu Asn Thr Lys Thr Cys Pro Tyr Val
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<210> 10

<211> 1860

<212> DNA

<213> Homo sapiens

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<210> 11

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<212> PRT

<213> Homo sapiens

<400> 11

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Ala Gly Ser Leu Leu Leu Trp Phe Leu Leu Phe Leu Leu Leu Leu Pro
 35              40              45

Pro Leu Pro Val Leu Leu Ala Asp Pro Gly Ala Pro Thr Pro Val Asn
 50              55              60

Pro Cys Cys Tyr Tyr Pro Cys Gln His Gln Gly Ile Cys Val Arg Phe
 65              70              75              80

Gly Leu Asp Arg Tyr Gln Cys Asp Cys Thr Arg Thr Gly Tyr Ser Gly
      85              90              95

Pro Asn Cys Thr Ile Pro Gly Leu Trp Thr Trp Leu Arg Asn Ser Leu
 100             105             110

Arg Pro Ser Pro Ser Phe Thr His Phe Leu Leu Thr His Gly Arg Trp
 115             120             125

Phe Trp Glu Phe Val Asn Ala Thr Phe Ile Arg Glu Met Leu Met Arg
 130             135             140

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Tyr	Tyr	Thr	Arg	Ile	Leu	Pro	Ser	Val	Pro	Lys	Asp	Cys	Pro	Thr	Pro		180	185				190	
Met	Gly	Thr	Lys	Gly	Lys	Lys	Gln	Leu	Pro	Asp	Ala	Gln	Leu	Leu	Ala		195	200				205	
Arg	Arg	Phe	Leu	Leu	Arg	Arg	Lys	Phe	Ile	Pro	Asp	Pro	Gln	Gly	Thr		210	215				220	
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Gly	Val	Asp	Leu	Gly	His	Ile	Tyr	Gly	Asp	Asn	Leu	Glu	Arg	Gln	Tyr		260	265				270	
Gln	Leu	Arg	Leu	Phe	Lys	Asp	Gly	Lys	Leu	Lys	Tyr	Gln	Val	Leu	Asp		275	280				285	
Gly	Glu	Met	Tyr	Pro	Pro	Ser	Val	Glu	Glu	Ala	Pro	Val	Leu	Met	His		290	295				300	
Tyr	Pro	Arg	Gly	Ile	Pro	Pro	Gln	Ser	Gln	Met	Ala	Val	Gly	Gln	Glu		305	310				315	320
Val	Phe	Gly	Leu	Leu	Pro	Gly	Leu	Met	Leu	Tyr	Ala	Thr	Leu	Trp	Leu		325	330				335	
Arg	Glu	His	Asn	Arg	Val	Cys	Asp	Leu	Leu	Lys	Ala	Glu	His	Pro	Thr		340	345				350	
Trp	Gly	Asp	Glu	Gln	Leu	Phe	Gln	Thr	Thr	Arg	Leu	Ile	Leu	Ile	Gly		355	360				365	
Glu	Thr	Ile	Lys	Ile	Val	Ile	Glu	Glu	Tyr	Val	Gln	Gln	Leu	Ser	Gly		370	375				380	
Tyr	Phe	Leu	Gln	Leu	Lys	Phe	Asp	Pro	Glu	Leu	Leu	Phe	Gly	Val	Gln		385	390				395	400
Phe	Gln	Tyr	Arg	Asn	Arg	Ile	Ala	Met	Glu	Phe	Asn	His	Leu	Tyr	His		405	410				415	
Trp	His	Pro	Leu	Met	Pro	Asp	Ser	Phe	Lys	Val	Gly	Ser	Gln	Glu	Tyr		420	425				430	
Ser	Tyr	Glu	Gln	Phe	Leu	Phe	Asn	Thr	Ser	Met	Leu	Val	Asp	Tyr	Gly		435	440				445	

Val Glu Ala Leu Val Asp Ala Phe Ser Arg Gln Ile Ala Gly Arg Ile
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Gly Gly Gly Arg Asn Met Asp His His Ile Leu His Val Ala Val Asp
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Val Ile Arg Glu Ser Arg Glu Met Arg Leu Gln Pro Phe Asn Glu Tyr
 485 490 495

Arg Lys Arg Phe Gly Met Lys Pro Tyr Thr Ser Phe Gln Glu Leu Val
 500 505 510

Gly Glu Lys Glu Met Ala Ala Glu Leu Glu Glu Leu Tyr Gly Asp Ile
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Asp Ala Leu Glu Phe Tyr Pro Gly Leu Leu Leu Glu Lys Cys His Pro
 530 535 540

Asn Ser Ile Phe Gly Glu Ser Met Ile Glu Ile Gly Ala Pro Phe Ser
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Leu Lys Gly Leu Leu Gly Asn Pro Ile Cys Ser Pro Glu Tyr Trp Lys
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Pro Ser Thr Phe Gly Gly Glu Val Gly Phe Asn Ile Val Lys Thr Ala
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Thr Leu Lys Lys Leu Val Cys Leu Asn Thr Lys Thr Cys Pro Tyr Val
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 610 615 620

Arg Pro Ser Thr Glu Leu
 625 630

<210> 12
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 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
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30

<210> 13
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 <213> Artificial Sequence

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<210> 14
<211> 38
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
primer

<400> 14
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<210> 15
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<212> PRT
<213> Artificial Sequence

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<212> DNA
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cgcgaccca ggggcgcca cgccag 86

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<212> DNA
<213> Homo sapiens

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 Ser Trp Trp Ser Leu Glu Cys Gln Ala Gln Pro Leu Ile Ser Leu Leu
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 Cys Arg Glu Ser Leu Ala Leu Val Leu Ala Val Pro Ala Pro Ala Pro
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 <213> Homo sapiens

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 50 55 60

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Leu Pro Val Leu Leu Ala Asp Pro Gly Ala Pro Thr Pro Gly
 50 55 60

<210> 21
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 <213> Homo sapiens

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Pro

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 <213> Homo sapiens

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Ser Arg Thr Gln Gly Arg Pro Arg Gln Val
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 Ser Trp Trp Ser Leu Glu Cys Gln Leu Ser Pro Ser Ser Leu Ser Ser
 20 25 30
 gca ggg agt ctc ttg ctc tgg ttc ttg ctg ttc ctg ctc ctg ctc ccg 144
 Ala Gly Ser Leu Leu Leu Trp Phe Leu Leu Phe Leu Leu Leu Pro
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 20 25 30
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 Ser Gly Gly Ala Leu Asn Ala Arg Leu Ser Pro Ser Ser Leu Ser Ser
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<210> 26
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 <213> Homo sapiens

<400> 26
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 1 5 10 15

Ser Gly Gly Ala Leu Asn Ala Arg Leu Ser Pro Ser Ser Leu Ser Ser
 20 25 30

Ala Gly Ser Leu Leu Leu Trp Phe Leu Leu Phe Leu Leu Leu Leu Pro
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<210> 27

<211> 32

<212> PRT

<213> Unknown Organism

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<223> Description of Unknown Organism: Canine sequence

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 20 25 30